NWS CHANGE FORM PART A	1. DATE SUBMITTED ~~20~~ 24 March 2000

This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).

2. ORIGINATOR OFFICE APO	3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/AWO1	4. COGNIZANT TECHNICAL INDIVIDUAL Name: Chris Deitz Routing Code:: W/APO1 Phone:: 301-713- 0211x141	5. ORIGINATOR TRACKING NUMBER P426_APO_A100048

6. SYSTEMS AFFECTED BY CHANGE

☐ DATA PRODUCTS (Complete Data Products Supplement)

☐ ASOS   ☒ AWIPS   ☐ CRS   ☐ NEXRAD   ☐ OTHER (specify) _____

7. WSH TRACKING NUMBER

NWS 569
24 March 2000

8. TITLE OF CHANGE
Ensure ETX is at the end of all AWIPS text products disseminated via the AWIPS-NWWS interface.

9. TYPE OF CHANGE

☐ HARDWARE   ☒ SOFTWARE   ☐ DOCUMENTATION ONLY

10. SITES AFFECTED (Attach Part B, Page 2, if needed)
All potential NWWS uplink sites and the NCF. Currently, there are 16 NWWS uplink sites: FWD, MPX, BIS, FSD, TOP, BOX, EAX, TSA, LSX, LZK, TFX, LUB, PHI, BMX, MFL, MKX. However, for flexibility downstream, this change needs to go to all sites eventually.

11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.)
While the "NNNN" is the official end of product delimiter, it appears that the ASCII "End of Text" or ETX is a current defacto standard end of product delimiter for some AWIPS processes and many external users, in particular, NWWS customers. The NWSTG has included the ETX at the end of all text products for this reason for some time. However, AWIPS on occasion generates and disseminates text products without this ending. This causes failure in some customer software which expects the ETX ending. This specification of ETX as an ending for AWIPS text products was an omission in the AWIPS-NWWS ICD. [DR # 5344 concurrently being written/posted]

12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)

AWIPS software should be changed to check and add if necessary an ETX character to all text products sent to the NWWS.
It should be noted that the current design includes two NWWS interfaces: one as part of the site software and another interface at the NCF as a third level backup for high priority products. Both interfaces will need to be modified.
The ICD between AWIPS and the NWWS needs to be modified to reflect this specification of ETX as the ending for all text products disseminated via the AWIPS-NWWS interface. Note: The proposed ICD for Replacement NWWS includes this modification.

13. ALTERNATE SOLUTIONS
The alternative solution would be to require all customers for AWIPS text products to process around the lack of an ETX.

14. REQUIRED CHANGE DATE 3/29/00	15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.) This change should be implemented before any further sites use their AWIPS to generate official text products and disseminate them via the NWWS, i.e when a site is in AWIPS Operational Mode (AOM) . When a site is in AOM, it uses AWIPS to generate and disseminate its official user text products. If these products are not receivable and/or usable by the sites' customers in the manner to which they have become accustomed (i.e. with AFOS), a serious service hazard exists.

CCB/PMC/CMB DECISION

16. DECISION AUTHORITY LEVEL	☐ CCB LEVEL ONLY	☐ PMC or NWS CMB DECISION REQUIRED

17. CCB LEVEL DECISION	☐ APPROVED ☐ RECOMMEND APPROVAL ☐ DISAPPROVED	SIGNATURE DATE SIGNED

FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED

18. PMC OR NWS CMB DECISION	☐ APPROVED ☐ DISAPPROVED	SIGNATURE DATE SIGNED

| This information is required for Data Products submissions. (Submitters should complete all applicable blocks, if known. WSH will assist.) Attach extra pages if necessary. | 2. WSH TRACKING NUMBER
NWS 569 |

3. AWIPS ID		4. AFOS PIL			5. WMO HEADER	6. ADD REV DEL	7. SEAS Y/N	8. CHAR PER MSG	9. FREQUENCY	10. NWSTG DISTR	11. AFOS DISTR	NWWS ONLY		
NNN	XXX	CCC	NNN	XXX								12. STATE CIRCUITS	13. PRIME UPLINK	14. B/U UPLINK
None	N/A													

FOR METAR CHANGES ONLY						19. INTERNAL NWS USE ONLY ☐	20. PRODUCT SOURCE	21. AWIPS DATA TYPE
15. COMMS ID	16. N. LATITUDE			17. W. LONGITUDE				
	DEG	MIN	SEC	DEG	MIN	SEC	18. ELEV (M)	

							22.	A. CHANGE NOTICE	B. EFFECTIVE DATE	C. ISSUE DATE
							AWIPS			
							AFOS			
							NWWS			

NWS CHANGE FORM
PART B

NWS CHANGE FORM **PART B**	**1. ORIGINATOR TRACKING NUMBER** P426_APO_A100048
All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.	**2. WSH TRACKING NUMBER** NWS569

FUNDING INFORMATION

Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)	3. SOURCE OF FUNDING	4. TOTAL COST $
5. DEVELOPMENT COSTS (Estimate development costs) TBD . It would be a minor fix.		AMOUNT $****
6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs)		AMOUNT $****
7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs)		AMOUNT
8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs)		AMOUNT
9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs) TBD		AMOUNT $****
9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits)		AMOUNT

SUPPORTING INFORMATION AND SCHEDULES
Provide detailed information needed to implement the requested change.

10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E) TBD	11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.)
12. IMPLEMENTATION/RETROFIT SCHEDULE TBD	13. FACILITY INFORMATION (Attach facility drawings/plans.)
14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.)	15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each)	17. COORDINATION OF CHANGE WITH OTHER CHANGES
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers. Attach Part B, Page 2, if needed.)	19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.)
20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.)	21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.)
22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.)	

NWS CHANGE FORM PART B - PHYSICAL ITEM AND DOCUMENT IMPACT MATRIX SUPPLEMENT								
1. ORIGINATOR TRACKING NUMBER P426_APO_A100048								

This information is required prior to publication of Engineering Modification Notes and Software Release Notes. List physical items to be replaced and specify any changes in related documentation. (Submitters should complete this information, if known. WSH will assist.)	2. WSH TRACKING NUMBER NWS 569

3. ITEM NAME, CIRCUIT TYPE, SOFTWARE VERSION, OR SITE LOCATION	4. REMOVE REPLACE MODIFY	5. SUPERSEDED ITEM OR CONFIGURATION		6. SUPERSEDING PART NUMBER OR NEW CONFIGURATION	7. DOC TYPE	8. SUPERSEDED DOCUMENT		9. SUPERSEDING DOCUMENT	
		A. PART NUMBER OR CONFIGURATION	B. SERIAL NUMBER(S) OR COMMENTS			A. IDENTIFIER	B. REV	A. IDENTIFIER	B. REV
AWIPS-NWWS ICD									
System Design Doc describing the Interface									
Release Notes									

NWS CHANGE FORM
PART C

NWS CHANGE FORM **PART C**	1. ORIGINATOR TRACKING NUMBER P426_APO_A100048
WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.	2. WSH TRACKING NUMBER NWS 569

3. CCB COST EVALUATION

NWS COST $ FAA COST $ DOD COST $ OTHER AGENCY COST $ TOTAL COST $
                                                            (SPECIFY)_____

4. IMPLEMENTATION DOCUMENTS REQUIRED

[X] Engineering Modification Note   ☐ Software Release Notes   ☐ Other Document (Specify)_____

ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.

5. IMPLEMENTATION ACTIVITY REQUIRED	6. REQUIRED COMPLETION DATE	7. RESPONSIBLE PERSON AND OFFICE	8. DOCUMENT OR ACTION REQUIRED TO VERIFY COMPLETION
A. Prepare Modification Note (1) Notify sites and complete installation. (2) Ensure this change is reported to the Weather Service Headquarters (WSH) through the Engineering Management Reporting System (EMRS) according to the instructions in Engineering Handbook number 4, part 2. Record this RC number (NWS**569**) in block 17a of the EMRS report. (3) Ensure the appropriate WSH management information systems and configuration management databases are updated to reflect these changes (See also attachment A)		Finke, W/CR41x4 Machado, W/ER41x4 Garcia, W/SR41x4 Fahy, W/WR411 del Cano, W/PR11 Peters, W/AR41 Michelle deTomasso (W/OSO113)	

Part C - Page 1

Attachment A

Author: Timothy Hopkins at W-OSD12
Date: 3/21/00 11:14 AM

Subject: updated action plan and status of ETX issue
-------------------------------- Message Contents --------------------------------
 1. Testing this will be a little tricky, so I have modified the testing scenario accordingly.

2. Chris will write a DR referencing the RC number. Assistance to be provided
by me (Tim Hopkins) and Chuck (if necessary), by COB today (3/20).

     I (Tim Hopkins) am responsible for writing the DR, with Bill Carrigg's
assistance (to get me an account on PCMS and nominally show me how to use it).
I will get this done as soon as PCMS is up

3. Coding to be done ASAP by Myron.

     This may already be done, but if not, will be soon.

4. Test implementation at MFL (tentative test date Thursday, 3/23) only. I
have a call in to Richard Watling for a recommendation as what WFO we should use
to send test products. Here is how I think it has to go.

     a. install new software fix at MFL. MFL because they are an active
AWIPS NWWS uplink but noone is currently using them to uplink products.
     b. Get WFO and HQ on phone at agreed upon test time, to reconfigure
their NWWS uplink config, to point to MFL only.
     c. Get TG on phone for monitoring of product receipt there.
     c. Get end user David Kellogg of PA State Highway Patrol and HQ, on
the phone, then have WFO send a low priority product and see what happens.
     d. Send several low priority products per c. and check for product
receipt at TG, SBN and WAN (if appropriate). Check text DB also. None of the
other versions of product should be affected.
     e. Might go ahead and try a high priority product, to see what
happens. Two copies will probably be broadcast, one from MFL and the other from
NCF. The MFL one will have the etx and the NCF will not.

5. If #4 is successful, try installing at FWD and MPX. Run there for a day or
so and then put at NCF, if no problems. After that go to the rest of the uplink
sites at complete implementation at remaining AWIPS uplink pairs (BIS,
FSD,TOP,BOX,EAX,TSA,LSX,LZK,TFX,LUB,PHI,BMX,MFL,MKX), by COB Thursday, 3/29)